



TECHNICAL DATA SHEET A/BENCENO/PET

Product Overview

Terrapura Corp. Issue Date: March 22, 2024

Terrapura A/BENCENO/PET is a masterbatch comprising a proprietary blend of organic compounds and a carrier resin, specifically designed to enhance the biodegradation of polyethylene terephthalate (PET)-based plastics in microbe-rich landfills when used according to the recommended guidelines.

Applications

Terrapura A/BENCENO/PET It can be used in all PET rigid, semi-rigid, flexible, and fiber spinning applications.

Properties

Appearance: Free flowing pellets

Color: white to off-white

Carrier: Polyethylene Terephthalate

Recommended use level: 1.2% - 5.0%, Target 1.5% for rigid and flexible, Target 2% for fiber

Composition (Component / CAS Number / OSHA PEL / ACGIH PEL / Wt %):

Polyester / mixture / none established / none established / 100

Recommended Procedure Terrapura Addition

Packaging and Loading Into Extruder:

To achieve a 1.5% load weight ratio: add 1.5 kg (1.5 lb) of Terrapura to 98.5 kg (98.5 lb) of base resin to make a 100 kg (100 lb) batch. To achieve a 2% load weight ratio: add 2 kg (2 lb) of Terrapura to 98 kg (98 lb) of base resin to make a 100 kg (100 lb) batch.

Reseal the package containing the remaining Terrapura product and store according to the instructions under Storage & Handling.

Extrusion Conditions:

No adjustments to the extrusion temperature profile are needed when using Terrapura. Ensure melt temperatures do not exceed 329°C (625°F) for extended periods. Terrapura is slightly hygroscopic (attracts water), but this should not pose any issues.

Storage & Handling

Terrapura A/BENCENO/PET is typically packaged in 10 kg / 22 lb bags and in a 400-700 kg corrugated Gaylord.

This product should be stored in accordance with good manufacturing practices and be stored in a cool, dry area in a closed container. Do not let the product get wet. Reseal the product container at the end of each use in accordance with good manufacturing practices, in a cool, dry area within a closed container. Avoid exposing the product to moisture. Reseal the container after each use, adhering to standard storage practices. Terrapura Corp. advises that inventories be rotated and used within six (6) months of purchase for optimal performance. Ensure no smoking, open flames, or sources of ignition in handling and storage areas. Good housekeeping and dust control are essential for the safe handling of this product. Specific handling information for containers, when necessary, can be found on the product label. with standard storage practices. Terrapura recommends that inventories are rotated and used within six (6) months of purchase for optimum performance. No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. When appropriate, unique handling information for containers can be found on the product label.

Company Identification



Pórtico 205 Col.
Industrial la capilla, CP
37297 León, Gto. Mex.
Tel: 4772230063

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SAFETY AND MANAGEMENT SHEET

1. Product and Company Identification

Issue Date: March 22, 2024
Product Code: Terrapura safety sheet
Supplier: Terrapura Corp.

Pórtico 205 Col.
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2. Hazards Identification

Classification of the product:

No need for classification according to GHS criteria for this product.

Label elements:

The product does not require a hazard warning label in accordance to GHS criteria.

Hazardous Components: None

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Hazard Ratings: Health: 0 Fire: 1 Reactivity: 0

Color: Physical White

State: Pellets

Odor: Hazards of Odorless to slight

Product: Slipping Hazard

Potential Health Effects

Eye Contact: Solid or dust may cause irritation or corneal injury due to mechanical action. Elevated Terra Pura may generate vapor levels at high temperatures sufficient to cause eye irritation. Effects may include discomfort and redness.

Skin Contact: Prolonged contact with Terra Pura is essentially non-irritating to the skin. Under normal processing conditions, the material is heated to elevated temperatures where contact with the material may cause thermal burns.

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Skin Absorption: No adverse effects anticipated by skin absorption.

Inhalation: No adverse effects are anticipated from single exposure to dust. Vapors / fumes released during thermal processing may cause respiratory irritation.

Ingestion: Low toxicity if swallowed. May cause choking if swallowed.

3. Composition Information

Product Name: A/BENCENO/PET

Composition (Component / CAS Number / OSHA PEL / ACGIH PEL / Wt %):

Polyester/ mixture / none established / none established / 100

Masterbatch Description: Harmonized system-based schedule B code 3902.90.0000. This product is not formulated to contain ingredients with exposure limits established by US agencies. It is not hazardous to health as defined by European Union Dangerous Substances and Preparation directives.

4. First-Aid Measures

Eye Contact: Not likely to be an eye hazard in present form. If contact, flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1 to 2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact: If molten material comes in contact with the skin, do not apply ice but cool under ice water or cool stream of water. DO NOT attempt to remove the material from the skin. Removal could result in severe tissue damage. Seek medical attention immediately. Inhalation: Material is not likely to be hazardous by inhalation, but if required move person to fresh air. If further effects occur, consult a physician. Ingestion: Not likely to be ingested in present form. If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

5. Fire Fighting Measures

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Firefighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.

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Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus and protective firefighting clothing to fight fire in enclosed areas. If protective equipment is not available or not used, fight the fire from a protected location or safe distance.

Unusual Fire and Explosion Hazards: Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate. Dense smoke is emitted when Terra Pura® is burned without sufficient oxygen.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition that may be toxic and/or irritating. Combustion products may include, but are not limited to: Carbon Monoxide and Carbon Dioxide.

6. Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Sweep up and collect in suitable and properly labeled containers.

Personal Precautions: Spilled material may cause a slipping hazard. Use appropriate safety equipment.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

7. Handling and Storage

General Handling: No smoking, open flames, or sources of ignition in the handling and storage area. Good housekeeping and controlling of dust are necessary for the safe handling of Terra Pura®. When appropriate, unique handling information for containers can be found on the product label.

Storage: Store Terra Pura® in accordance with good manufacturing practices. Store in a cool, dry area in a closed container. Do not let the product get wet. Reseal the product container at the end of each use in accordance with normal storage conditions.

8. Exposure Controls / Personal Protection

Exposure Limits: None established.

Eye/Face Protection: Not likely to be an eye hazard in present form. Use safety glasses with side shields or safety goggles.

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Skin Protection: No precautions other than clean body covering clothing should be needed.

Hand Protection: Chemical protective gloves should not be needed when handling Terra Pura®. Consistent with general hygienic practice for any material, skin contact should be minimized. Use gloves to protect from mechanical injury. Use gloves with insulation for thermal protection when needed.

Respiratory Protection: Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present.

Ingestion: It is not likely that Terra Pura® will be ingested in its present form. Use good personal hygiene. Do not consume or store food in the work area. Wash hands prior to smoking or eating.

Ventilation: Use local exhaust ventilation or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. General ventilation should be sufficient for most operations, but local exhaust ventilation may be necessary for some operations.

9. Physical and Chemical Properties

Physical State:	Pellets
Color:	White
Odor:	Odorless or slight
Flash Point:	Not Applicable
Vapor Pressure:	Not Applicable
Specific Gravity:	Not Established
Boiling Point:	Not Applicable
Melting Point (C):	Not Established
Air Density:	Not Applicable
Evaporation Rate:	Not Applicable
Solubility In Water:	Negligible

10. Stability and Reactivity

Stability / Instability:	Stable Exposure to elevated temperatures can cause product to decompose. Excessive Moisture. None known Will not occur
Conditions to Avoid:	Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. Decomposition products can include and are not limited to carbon monoxide, carbon dioxide. Trace amounts of other toxic emissions are possible.
Incompatible Materials:	
Hazardous Polymerization:	
Thermal Decomposition:	

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14. Transport Information

DOT Non-Bulk: Not Regulated

DOT Bulk: Not Regulated

IMDG/IMO: Not Regulated

ICAO/IATA: Not Regulated

TDG (Canada): Not Regulated

15. Regulatory Information

OSHA Hazard Communication Standard: This product is not a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-To-Know Act of 1986) Sections 311 and 312:

Immediate (Acute) Health Hazard:	No
Delayed (Chronic) Health Hazard: Fire	No
Hazard: Reactive Hazard: Sudden	No
Release or Pressure Hazard: No	No

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-To-Know Act of 1986) Sections 313: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

This product contains no listed substances known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels that would require a warning under the statute.

US Toxic Substances Control Act (TSCA): The components of this product are either on the TSCA inventory or exempt from the TSCA inventory. All components comply with TSCA.

CEPA – Domestic Substances List (DSL): All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

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16. Other Information

Recommended Uses and Restrictions: We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

Legend

OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
HAZ/DES	Hazard Designation

IN ANY CASE OF EMERGENCY PLEASE CONTACT 911 OR THE
EMERGENCYS NUMBERS IN YOUR LOCATION

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